

## HADHSC

Cat#: M1409-2

**Product Type:** Mouse mAb **Isotype:** IgG1,  $\kappa$  chain **Clone ID:** D10-E7

**Species reactivity:** Human, mouse

**Positive control:** 293, human liver, mouse liver

**Subcellular location:** Mitochondrion matrix

**Database links:** SwissProt Q16836 (human)

**Applications:** WB, ICC

**Lot#:** See on the tube

**Form:** Liquid

**Molecular Wt.:** 34kDa

**Description:** Hydroxyacyl-Coenzyme A dehydrogenase also known as HADH is an enzyme which in humans is encoded by the *HADH* gene. This gene is a member of the 3-hydroxyacyl-CoA dehydrogenase gene family. The encoded protein functions in the mitochondrial matrix to catalyze the oxidation of straight-chain 3-hydroxyacyl-CoAs as part of the beta-oxidation pathway. Its enzymatic activity is highest with medium-chain-length fatty acids. Mutations in this gene cause one form of familial hyperinsulinemic hypoglycemia. A deficiency is associated with 3-hydroxyacyl-coenzyme A dehydrogenase deficiency.

**Immunogen:** This antibody is produced by immunizing mice with a synthetic peptide corresponding to a region of HADHSC.

### Recommended Dilutions:

WB: 1:1,000-1:2,000

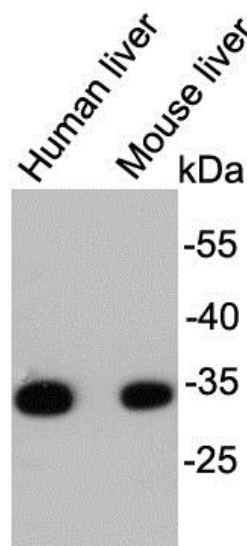
ICC: 1:500

**Buffer:** 1\*TBS (pH7.4), 0.5%BSA, 40%Glycerol.

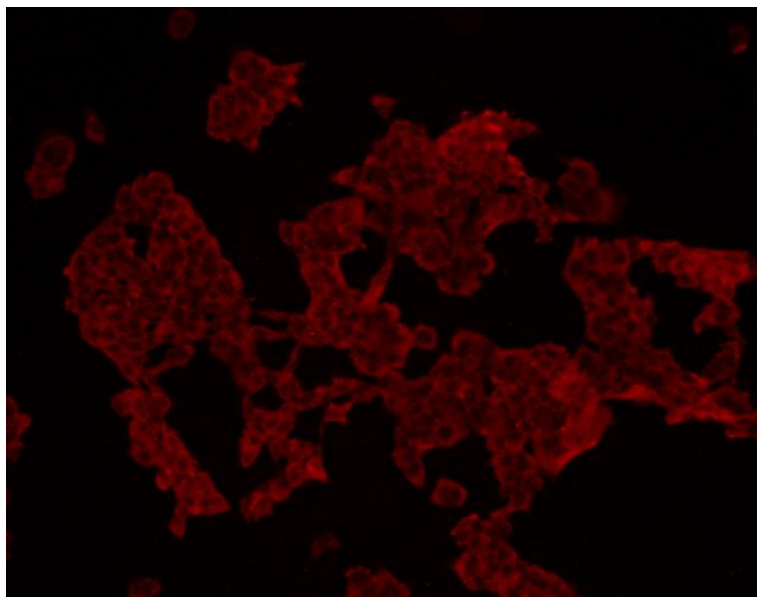
Preservative: 0.05% Sodium Azide.

**Storage:** Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

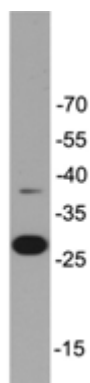
**Purity:** ProA affinity purified.



**Fig1:** Western blot analysis on tissue lysates using anti- HADHSC mouse mAb.



**Fig2:** ICC staining HADHSC in 293 cells (red). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



**Fig3:** Western blot analysis on zebra fish tissue lysates using anti- HADHSC mouse mAb.

#### Background References:

1. "Sequestration of the active site by interdomain shifting. Crystallographic and spectroscopic evidence for distinct conformations of L-3-hydroxyacyl-CoA dehydrogenase." Barycki J.J., O'Brien L.K., Strauss A.W., Banaszak L.J. *J. Biol. Chem.* 275:27186-27196(2000)
2. "Fulminant hepatic failure associated with mutations in the medium and short chain L-3-hydroxyacyl-CoA dehydrogenase gene." O'Brien L.K., Rinaldo P., Sims H.F., Alonso E.M., Charrow J., Jones P.M., Bennett M.J., Barycki J.J., Banaszak L.J., Strauss A.W. *J. Inherit. Metab. Dis.* 23 Suppl. 1:127-127(2000)
3. "3-hydroxyacyl-CoA dehydrogenase and short chain 3-hydroxyacyl-CoA dehydrogenase in human health and disease." Yang S.-Y., He X.-Y., Schulz H. *FEBS J.* 272:4874-4883(2005)